

West Joint Board Meeting on Economic Dispatch Salt River Project 11/13/05

SRP Background

Founded in 1903, the Salt River Project provides water and electricity to the Phoenix metropolitan area. The Power District was formed in 1937 as a political subdivision of the State of Arizona. SRP is the third largest public power utility in the United States and currently provides electricity to over 850,000 customers.

SRP serves a summer peak load of over 6,000 MW from a resource portfolio consisting of nuclear, coal, gas, & hydro generation and long-term, short-term, and renewable energy purchases.

SRP has a Native Load Service Obligation, required by Arizona State law, and as defined in the Federal Power Act and Energy Policy Act of 2005. The elected board charged with regulatory oversight of SRP has mandated that SRP seek to provide least-cost reliable electric service to its native load.

SRP Dispatch Philosophy & Procedures

- SRP dispatches its own generation assets and procures power in the wholesale market to serve its customers at the least possible cost.
- SRP employs various models in the forward, day ahead, and real-time markets to perform economic dispatch. These models consider fuel costs, fuel deliverability, heat rates, unit startup costs, delivery costs, environmental issues, hydro system conditions, market opportunities, etc.
- Existing physical and financial contract obligations are also considered in the models for economic dispatch.
- Economic dispatch at SRP is performed by the merchant/native load function but dispatch decisions may be adjusted in real-time in collaboration with the reliability function to account for system constraints.
- System constraints, including transmission availability, import capability limits, voltage constraints, and unit operating characteristics, are factored into final dispatch decisions.

SRP Key Points

- Economic dispatch is working at SRP. SRP has consistently managed its resources to provide safe and reliable service to its native load at rates that are among the lowest in the region.
- Economic dispatch is working in the Western region. The robust wholesale markets in the West support and facilitate the integration of utility and non-utility generation dispatch. Market efficiency and transparency have improved through the development of high volume electronic trading platforms, physical trading “hubs”, and the availability of financial products and services.
- Standard market dispatch regulations/rules applied homogeneously across the nation not only are unlikely to decrease cost but may, in fact, increase cost of service to customers and/or decrease reliability. Be aware of the potential for unintended consequences, including, for example, a disproportionate emphasis on one particular dispatch consideration (for example, heat rate) to the diminution of other factors that may be more important for the specific generation portfolio being managed.
- State and local regulatory agencies should retain oversight authority for economic dispatch. Oversight of policies and procedures that affect customer rates has traditionally been reserved at the state and local level where accountability to customers is the strongest. Also, local variations in generation portfolios are best understood and managed at the local level.
- In contrast to the sound reasons for local economic dispatch decisions, there is neither a need nor a compelling reason for a Federal role in such activities.